Regarding Docket # 05-235:

A. Morse Code Requirement

The Commission is making the right choice in choosing to drop the morse Code requirement.

The arguments in favor of morse code testing all point toward the same end: Morse code is so important that all licensees (of a specific class) must have morse code capability.

I put it to you that we ALREADY HAVE significant numbers of General (and perhaps Extra) class licensees who do not have morse code capability. There are two ways this can happen:

First, is atrophy of skills from lack of sufficient use.

The requirement is to pass a code test once at the time you apply for your license. It is well known in the community that your morse code skill will atrophy if you do not work to maintain it. This is clearly documented in various morse code study guides. It is also documented in the experience of amateurs who (in the past) tried for license upgrades and found that they could not receive morse code at the same speed that they had already been tested for, much less at the higher rate required for the upgraded license.

(See, for example, http://www.arrl.org/news/features/2002/11/05/1/ "We hadn't forgotten Morse code per se, but our copying speed was way down. Since we couldn't even copy at 13 WPM anymore, 20 WPM appeared very far away indeed.")

Second, is through lack of suitable equipment.

There is no requirement that a licensee have the equipment necessary to operate CW. If all you have available is a 2 meter FM handheld, your morse code skills won't do you any good. If all you have is a digitally tuned HF SSB/CW transceiver, you don't have the supposed advantage of operating at extremely low power and thus conserving your "couple of D batteries" in case of an emergency.

When either of these cases applies, the net effect is an operator who CANNOT (for one reason or the other) operate CW with morse code. Whether that operator was able to pass a 5 WPM test some time in years past is irrelevant.

So we have already done the experiment of having General class licensees who cannot use morse code. The results are the current state of the world today.

[ I note that among all the pro-code arguments I have encountered, none call for a requirement to maintain morse code skill over time (e.g. by revoking licenses of those who fail periodic retesting) and none call for a requirement that licensees possess suitable low power CW equipment for use in an emergency. If the ability to actually use morse code is so important, I am at a loss to explain this omission. ]

By removing the morse code requirement, you enable access to higher license levels for people who cannot learn morse code, but who otherwise could be contributing to the service. (I expand on this idea with my personal experience below.)

I have no doubt that a smaller percentage of licensees will be skilled in morse code, but I am not at all certain that the same applies to absolute numbers. If morse code is really as advantageous as its proponents suggest, many amateurs will learn to use it anyway. Conversely, if people do not choose to learn it voluntarily, perhaps the advantages are overstated.

Also, I have no doubt that some operators will use machine assisted morse code with devices such as MFJ Enterprises model MFJ-452 "Morse Reader with Built-In Keyer", which is basically a tiny computer that sends and receives morse code, but presents the operator with a keyboard and a small display.

I note one particularly interesting observation regarding station identification: The author is concerned that if few people know morse

code, then station identification with morse code could present a problem. The suggested solution was that identifications be more appropriate to the mode in use, such as synthesized speech on phone transmissions.

I recognize the relevance of his concerns, but I think that a workable solution would be to reduce the speed specified in 97.119(b)(1) from 20 WPM to 5 WPM. I make this comment based on identifying VOR transmitters when flying in small planes. I don't know morse code, but at the low speed used, you don't need to know morse code to compare the sequence of dits and dahs transmitted by the beacon with the sequence of dots and dashes printed on the chart.

Likewise, it is relatively easy to write down the sequence of dits/dahs (IF they are sent slowly enough) and look up the letters that correspond to the received sequence. If you are trying to do something with a call sign, you would certainly be writing it down anyway, so the added translation step is an adequate tradeoff in return for reduced complexity in the transmitter.

B. Operating Privileges

I think some good arguments could be made for granting some HF access to Technician licensees, but I cannot claim those arguments so compelling as to oppose the decision given in paragraph 24, and so find myself in mild agreement with the Commissions reasoning.

C. Number of License Classes

I believe the Commission's decision is reasonable enough, though other choices would also be good enough.

D. Exams

I agree with the Commission's findings.

One of the great advantages of the VEC system is that the FCC can

outsource the whole testing issue at no cost. The amateur community has, as far as I can tell, acted in its own best interests in trying to make the VEC system work as smoothly as possible. I don't see the problems that proposed changes are trying to solve.

As far as specific issues:

Examination Content: I note that the summary makes no mention of the petitioners attempting to work through NCVEC to resolve their concerns about the test content. Further, I see no claims that the potential problems cited are actually happening.

Repeating failed exams: The Commissions reasoning is sound. I add that I actually observed VEs using discretion in retesting, advising some candidates "you were really close, you might pass if you try again" and others "I suggest you study more and come to the next exam session".

X. Personal observations

I am a counter-example to all those who say that the morse code requirement does not act as a barrier to becoming an amateur radio operator.

In the mid-1970's I became interested in electronics. I assembled my own shortwave receiver (from a kit; I would have just become interested in electronics at the time, probably around age 10 to 12) and listened regularly to various broadcasts.

As I began reading about electronics, I also became aware of amateur radio. I was very interested at first, until I had time to reflect on the licensing requirements. The most significant piece of data I saw was a table of licenses, requirements, and privileges.

I couldn't see why 25 WPM morse code would entitle you to use RTTY but you need to demonstrate 35 WPM morse code to transmit amateur television. Bear with me if the exact numbers are incorrect, but the basic observation was that you needed to get faster and faster at morse code in order to gain permission to use modes that were not related to CW in any way.

I could clearly see that amateur radio would be a dead end to me because of the code requirement. I could barely imagine achieving 5 WPM someday, much less 30 or 35.

Fortunately, microcomputers were becoming available at the time, and I turned my interests that way. From that point on, my hobby electronics was principally digital, and I ended up with a career in software engineering, where I've worked on a wide variety of projects including an orbiting physics experiment and a satellite communication system.

In the early 1990s, when the FCC was considering dropping the code requirement for VHF access, I was in favor of the change. It might have been enough to attract me to amateur radio, had my personal circumstances been a little different, but, at the time, a new hobby was not a high priority.

In the past few years, I've once again taken an interest in radio. Over several months earlier this year, I have confirmed that I still cannot learn the complete morse alphabet and what symbols I do recognize, I cannot copy at any reasonable speed. So 30 years later, I've once again given up on morse code.

I decided that for my interest in radio, I would get a Technician license (there was never any question that I would qualify easily) and build VHF equipment. I was aware of the petitions to drop the morse code, but I also recognized that it might not happen, so I assumed that Technician is the highest class of license that I would ever obtain.

I went for the license exam this past weekend, and passed quite easily. The VE suggested that I try the written exam for General class on the principle that I had nothing to lose by trying and the code requirement _might_ be dropped.

I passed the General class exam easily, and went on to fail the Extra class exam, though I did fairly well, considering that I never intended to take either of these exams, and consequently had not studied the material.

So I qualified for the General class license on the basis of my knowledge, not through having memorized the question set, with the sole exception of the morse code requirement.

If the morse code was as easy to learn for me as it is for the pro-code faction, I would have jumped through that hoop by now. I think their perceptions are distorted, however, because they associate with a self-selected group of people who find morse code both relatively easy and interesting. They evidently are not routinely talking to people like me, or they would know that it is difficult and boring for some of us. Instead, they don't know me and just dismiss my difficulties as "not motivated enough".

I think the field of amateur radio is sufficiently challenging in many aspects. We don't need to add artificial challenges in the form of a morse code requirement.